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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,977	08/04/2003	John M. Swant	FSP0023	6951

7590 06/15/2006
Charles A. Mirho
112 W. 37th St.
Vancouver, WA 98660

EXAMINER

PHAM, TUAN

ART UNIT PAPER NUMBER

2618

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/634,977	Applicant(s) SWANT, JOHN M.	
	Examiner TUAN A. PHAM	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. **Claims 1-4, 6-12, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kiukkonen et al. (Pub. No.: US 2004/0203466, hereinafter, "Kiukkonen").**

Regarding claim 1, Kiukkonen teaches a method of testing performance of a receiver, the method comprising.

establishing a communication link between a transmitter and a receiver (see figure 5, TX 400A, receiving part of base station ([0033-0036]);

transmitting from the transmitter a signal bearing a predetermined message at a predetermined attenuation (see figure 5, [0033-0036], the predetermine attenuation is 0.1 dB);

receiving the predetermined message at an antenna coupled to a receiver (see [0029]);

measuring the power of the signal received by the antenna at a point between the receiver and the antenna ([0026-0028]);

calculating a bit-error rate by comparing the receiver output to the predetermined message (see [0026-0028]); and

determining receiver performance by evaluating the bit-error rate, the predetermined attenuation, and the received message power (see [0026-0028, 0034-0035]).

Regarding claim 2, Kiukkonen further teaches receiver is deployed in a communication network (see [0036] GSM system).

Regarding claim 3, Kiukkonen further teaches cellular network (see [0036] GSM system).

Regarding claim 4, Kiukkonen further teaches at least one selected from the group of a voice channel, a data channel, and a control channel (see [0022]).

Regarding claim 6, Kiukkonen teaches in a mobile communication network, comprising:

a radio base station receiver test system (see figure 5, transmitter 400A) that transmits a predetermined message to a base station receiver (see figure 5, receiving

part, col.4, [0036]) at a predetermined attenuation (see [0034], predetermine attenuation 0.1dB0, that measures received power at the antenna ([0029]), that calculates the bit-error rate of the predetermined message received by the radio base station receiver (see [0026]), and determines receiver performance quality as a function of the bit-error rate, measured power and predetermined attenuation (see [0026-0034]).

Regarding claim 7, Kiukkonen further teaches cellular network (see [0036] GSM system).

Regarding claim 8, Kiukkonen further teaches GSM communication network (see [0036] GSM system).

Regarding claim 9, Kiukkonen teaches in computer readable medium, a receiver testing application supporting field testing of base station receivers in a mobile communication network (see figure 5, [0002]), comprising:

- a routine for establishing a communication link between a transmitter and a receiver (see figure 5, TX 400A, receiving part of base station ([0033-0036]);

- a bit-error rate detector routine that compares a received message to a predetermined message to determine errors in the received message (see [0026]);

- a control routine for controlling transmission attenuation level of a signal bearing the predetermined message (see [0034-0036]);

- a communication routine for requesting measured power of received signals having the predetermined message (see [0026]); and

- an evaluation routine for comparing the measured power, bit-error rate, and attenuation to determine receiver performance (see [0026-0036]).

Regarding claim 10, Kiukkonen further teaches the communication routine requests the measured power before the received message enters the receiver (see [0033]).

Regarding claim 11, Kiukkonen further teaches the control routine increases the transmission attenuation level in response to the signal bearing the predetermined message (see [0035-0036]).

Regarding claim 12, Kiukkonen further teaches the communication routine requests the measured power from a power measurement device (see [0026]).

Regarding claim 14, Kiukkonen teaches in a cellular communication network, a method of determining base station receiver performance, comprising:

transmitting a known message at a known attenuation level (see figure 5, [0034]);

receiving the message at an antenna coupled to a base station receiver (see figure 5, receiving part, [0029, 0036]);

measuring the power of the received message (see [0026]);

transmitting the received message from the base station receiver to a network element (see figure 5, signal receive at antenna to transmit to receiving part included ATT 515);

calculating the bit error rate of the received message at the network element (see [0026]); and

evaluating performance of the base station receiver by analysis of the bit-error rate in a plurality of received messages as a function of attenuation and received message power (see [0026-0034]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsen (U.S. patent No.: 6,965,568) in view of Kiukkonen et al. (Pub. No.: US 2004/0203466, hereinafter, "Kiukkonen").**

Regarding claim 15, Larsen teaches a receiver (see figure 8), comprising:

a power measurement device (see figure 8, power measurement 161);
an attenuator coupled to the power measurement device (see attenuator 102, power measurement 161);
a mobile station (read on transceiver)(see figure 8, col.13, ln.58-67); and
a controller coupled to the attenuator and the mobile station, wherein, the controller is programmable to initiate a communication link via the mobile station to a remote device and transmit a predetermined message to said remote device (see figure 8, col.3, ln.22-60).

It should be noticed that Larsen fails to teach receiver test unit. However,

Kiukkonen teaches such feature (see figure 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kiukkonen into view of Larsen in order to perform the test at base station as suggested by Kiukkonen at col.1, [0005].

Regarding claim 16, after combine, Kiukkonen further teaches the receiver under test and antenna under test, and Larsen teach a power measurement (see figure 8, power measurement 161).

Regarding claim 17, Kiukkonen further teaches the power measurement device measures the received signal power of the predetermined message at a point prior to a receiver-under-test's input (see [0026]).

5. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiukkonen et al. (Pub. No.: US 2004/0203466, hereinafter, "Kiukkonen") in view of Ostman et al. (U.S. Patent No.: 6,529,494, hereinafter, "Ostman").**

Regarding claim 5, Kiukkonen discloses invention, but fails to disclose increasing the magnitude of the predetermined attenuation until the communication link is dropped. However, Ostman teaches such features (see col.5, ln.4-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Ostman into view of Kiukkonen in order to perform the test at base station as suggested by Kiukkonen at col.1, [0005].

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kiukkonen et al. (Pub. No.: US 2004/0203466, hereinafter, "Kiukkonen") in view of Laham et al. (U.S. Patent No.: 6,507,737, hereinafter, "Laham").

Regarding claim 13, Kiukkonen discloses invention, but fails to disclose the evaluation routine medium resides in a MSC test unit. However, Laham teaches such features (see figure 1, col.9, ln.7-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Laham into view of Kiukkonen in order to perform the test at base station as suggested by Kiukkonen at col.1, [0005].

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Bradley et al. (U.S. Patent No. 5,642,039), Mintz (U.S. Patent No. 6,266,527), LaMedica, Jr. (U.S. Patent No. 7,024,161), and Elbatt et al. (U.S. Pub. No. 2004/0062551) are not applied into this Office Action; they are also called to Applicants attention. They may be used in future Office Action(s).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A. Pham whose telephone number is

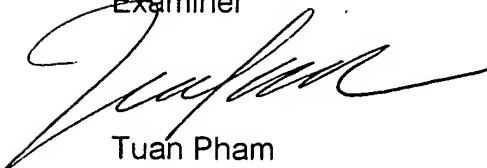
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(571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2618
June 5, 2006
Examiner



Tuan Pham

Supervisory Patent Examiner
Technology Center 2600



Matthew Anderson